

M 5.4, 9 km E of Esmeraldas, Ecuador

Origin Time: 2022-03-27 20:17:09 UTC (Sun 15:17:09 local)  
Location: 0.9460° N 79.5678° W Depth: 46.0 km

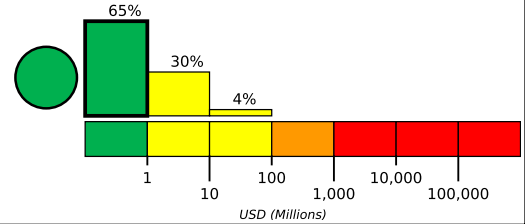
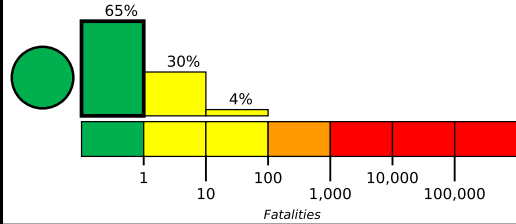
PAGER Version 3

Created: 2 hours, 4 minutes after earthquake

Estimated Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.

Estimated Economic Losses

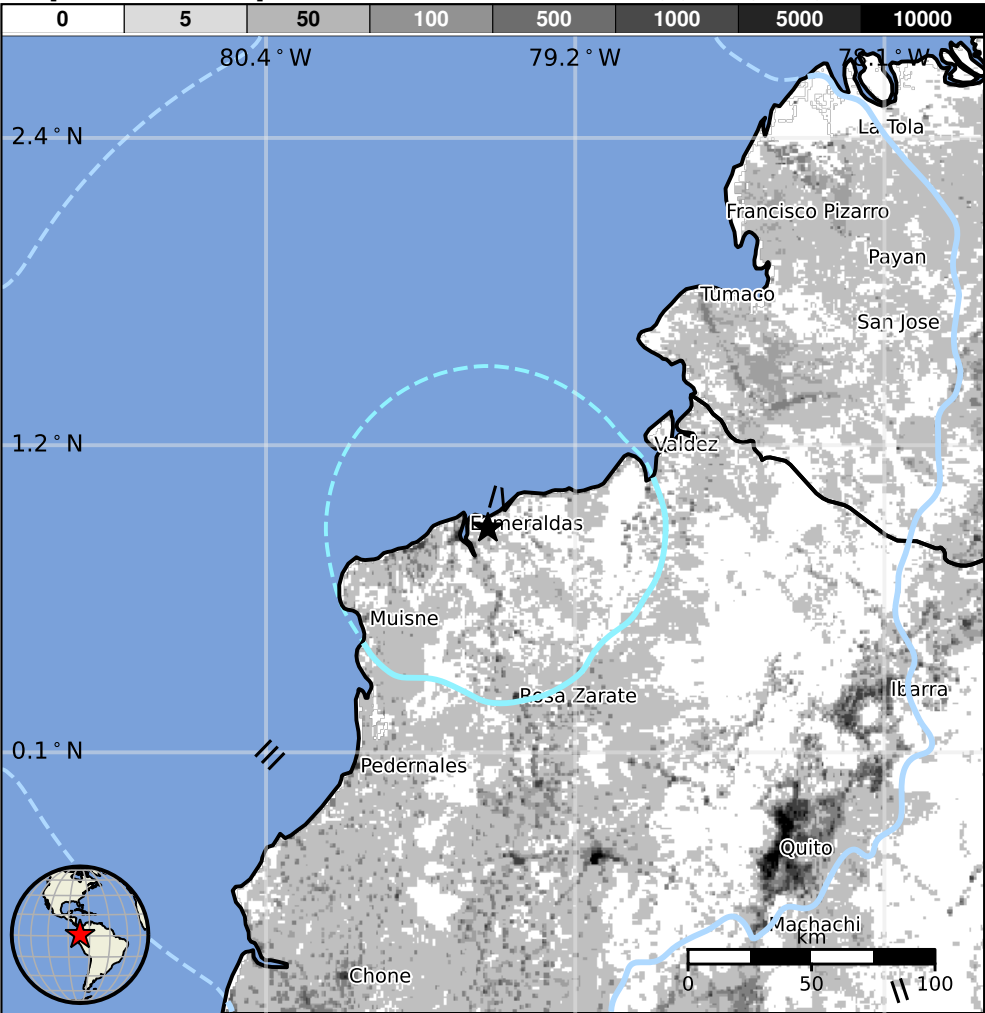


Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		—*	5,664k	445k	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

\*Estimated exposure only includes population within the map area.

Population Exposure



Structures

Overall, the population in this region resides in structures that are highly vulnerable to earthquake shaking, though some resistant structures exist. The predominant vulnerable building types are mud wall and informal (metal, timber, GI etc.) construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
2000-09-20	338	5.5	VI(99k)	1
1987-09-22	276	6.3	VI(53k)	2
1987-03-06	220	7.1	IX(2k)	1k

Recent earthquakes in this area have caused secondary hazards such as landslides and liquefaction that might have contributed to losses.

Selected City Exposure

MMI	City	Population
IV	Esmeraldas	165k
IV	Cube	<1k
IV	Muisne	13k
IV	Rosa Zarate	42k
III	Valdez	11k
III	San Lorenzo de Esmeraldas	20k
III	Santo Domingo de los Colorados	200k
III	Tumaco	87k
III	Tutamandahostel	140k
III	Ibarra	133k
III	Quito	1,400k